

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
(PW FORM PAT-1449)  
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Atty.  
Dkt. No.

M#

Client Ref.

0284781

081289

Applicant: Timothy A. Hovanec

Appln. No.: 10/659,980

Filing Date: September 10, 2003

Examiner: SALMON Group Art Unit: 1652-1634

Date: June 4, 2004

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# U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
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# FOREIGN PATENT DOCUMENTS

ORIGINAL PATENT DOCUMENTS							Abstract		Readily Available	
		Document Number	Date MM/YYYY	Country	Inventor Name		Enclosed	No	Enclose	No
	OR									
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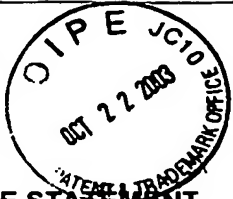
# OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

KS. ↓	TR	Aakra, Agot et al., "RFLP of rRNA genes and sequencing of the 16S-23S rDNA intergenic spacer region of ammonia-oxidizing bacteria: a phylogenetic approach," Intl. Journal of Systematic Bacteriology, 1999, pp. 123-130			
	UR	Hovanec, Timothy et al., "Comparative Analysis of Nitrifying Bacteria Associate with Freshwater and Marine Aquaria," Applied and Environmental Microbiology, Aug. 1996, pp. 2888-2896			
	VR	Burrell, Paul C. et al., "Aquatic Nitrate Oxidising Microorganisms," Canadian Intellectual Property Office, Nov. 20, 1998, pp. 1-76			
	WR				
	XR				
	YR				

Examiner /Katherine Salmon/

Date Considered: 05/10/2006

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



Atty. Dkt. No.	M#	Client Ref.
	0284781	081289

**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

Applicant: Timothy A. Hovanec	
Appln. No.: 10/659,980	
Filing Date: September 10, 2003	
Examiner: SALMON	Group Art Unit: 1634

Date: October 14, 2003

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**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
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					Enclosed	No	Enclose	No
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	QR							
	RR							
	SR							
	TR							
	UR							
	VR							

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

KS	WR	Tal, Yossi et al.; "Characterization of the Microbial Community and Nitrogen Transformation Processes Associated with Moving Bed Bioreactors in a Closed Recirculated Mariculture System; Elsevier Science B.V., Aquaculture, 2003, pp 187-202			
	XR				
	YR				
	ZR				
	AAR				
	BBR				

Examiner: /Katherine Salmon/	Date Considered: 05/10/2006
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<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <i>(Use several sheets if necessary)</i>		<b>Docket Number (Optional)</b> 81289-284781  <b>Applicant</b> HOVANEK  <b>Filing Date</b> September 10, 2003		<b>Application No.</b> <del>Unassigned</del> 101659980  <b>Group Art Unit</b> <del>Unassigned</del> 1634	
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U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS						
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation
						Yes    No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
KS	TESKE et al.: "Evolutionary relationships among ammonia- and nitrite-oxidizing bacteria" DATABASE: EBI ACCESSION NO.: L35505 DATE OF AVAILABILITY: November 29, 1994
↓	VAN DER MEER et al.: "Characterization of the bacterial composition of a nitrogen-removing biofilm from a trickling filter at Kollikon, Switzerland" DATABASE: EBI ACCESSION NO.: AJ224941 DATE OF AVAILABILITY: March 13, 1998
↓	PURKHOLD et al.: "Comparative 16S rRNA and amoA sequence analysis: Implications for molecular diversity surveys" DATABASE: EBI ACCESSION NO.: AF272420 DATE OF AVAILABILITY: December 6, 2000
↓	SUWA et al.: "Phylogenetic relationships of activated sludge isolates of ammonia oxidizers with different sensitivities to ammonium sulfate," J. GEN. APPL. MICROBIOL., vol. 43, pages 373-379 (1997)
↓	SUWA: "Nitrosomonas sp. JL21 gene for 16S rRNA, partial sequence" DATABASE: EBI ACCESSION NO.: AB000700 DATE OF AVAILABILITY: May 5, 1998
↓	HEAD et al.: "The phylogeny of autotrophic ammonia-oxidizing bacteria as determined by analysis of 16S ribosomal RNA gene sequences," JOURNAL OF GENERAL MICROBIOLOGY, vol. 139, pages 1147-1153 (1993)
↓	STACKEBRANDT et al. (2001) Encyclopedia of Life Sciences, pages 1-7, Nature Publishing Group, New York, NY
EXAMINER	/Katherine Salmon/  EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.
	DATE CONSIDERED <div style="text-align: right;">05/10/2006</div>